

laterally, it was well-rounded, broadest just above the little-flattened base, with low, longitudinal, raised ribs connected by delicate, transverse ridges. The longitudinal ribs were sixteen in number, of which four pairs, each consisting of two ribs uniting near the summit at a sharp angle, enclosed within the four loops thus formed from one to three shorter ribs. Diameter, 1.27 mm. Nine days after deposition the egg began to hatch, one rainy forenoon, having become darker and finally of a brassy color, the shell being transparent between the ribs. The larva intermittently gnawed an opening at the micropyle, then started a second hole which at length coalesced with the first one. Although the aperture thus formed was large enough, the larva did not emerge but began two more openings on the side of the egg-shell. The shell had become shrunken and distorted, meanwhile. I watched the progress of hatching, or rather, lack of progress, for two days, at intervals. The caterpillar's method of work was to eat for ten minutes

and then to rest for forty-five, and when I made investigations during an unusually long rest, I found that the larva had died.

At Prospect Hill, Waltham, Mass., June 10, 1894, I enclosed a suspicious acting *T. juvenalis* alive in a small pasteboard box in which she soon laid a single egg, the hatching of which I did not witness, however. This female also had been fluttering about seedling white-oaks in an inquisitive way.

Justus W. Folsom.

NOTES.—A new monthly journal of entomology has appeared in Tokyo, Japan, under the title *Konchū Gaku Zasshi*, or Journal of Insect Science. The first number was issued in October last and is wholly in Japanese excepting an English title and the statement that the plate represents insects injurious to rice and mulberry.

In the Kansas University Quarterly for January, W. A. Snow gives a list of N. A. Asilidae supplementary to Osten Sacken's Catalogue.

Just Published, by Henry Holt & Co., New York.

Scudder's Brief Guide to the Commoner Butterflies.

By SAMUEL H. SCUDDER. xi + 206 pp. 12mo. \$1.25.

An introduction, for the young student, to the names and something of the relationship and lives of our commoner butterflies. The author has selected for treatment the butterflies, less than one hundred in number, which would be almost surely met with by an industrious collector in a course of a year's or two year's work in our Northern States east of the Great Plains, and in Canada. While all the apparatus necessary to identify these butterflies, in their earlier as well as perfect stage, is supplied, it is far from the author's purpose to treat them as if they were so many mere postage-stamps to be classified and arranged in a cabinet. He has accordingly added to the descriptions of the different species, their most obvious stages, some of the curious facts concerning their periodicity and their habits of life.

Scudder's The Life of a Butterfly.

A Chapter in Natural History for the General Reader.

By SAMUEL H. SCUDDER. 186 pp. 16mo. \$1.00.

In this book the author has tried to present in untechnical language the story of the life of one of our most conspicuous American butterflies. At the same time, by introducing into the account of its anatomy, development, distribution, enemies, and seasonal changes some comparisons with the more or less dissimilar structure and life of other butterflies, and particularly of our native forms, he has endeavored to give, in some fashion and in brief space, a general account of the lives of the whole tribe. By using a single butterfly as a special text, one may discourse at pleasure of many; and in the limited field which our native butterflies cover, this method has a certain advantage from its simplicity and directness.